

Alternative Agricultural Opportunities:

Organic Cured Meat



Paul D. Mitchell

Professor, Agricultural and Applied Economics
Extension Specialist, Cropping Systems Management

Director, Renk Agribusiness Institute

608-320-1162, pdmitchell@wisc.edu, [@mitchelluw](https://twitter.com/mitchelluw) 

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La Crosse WI



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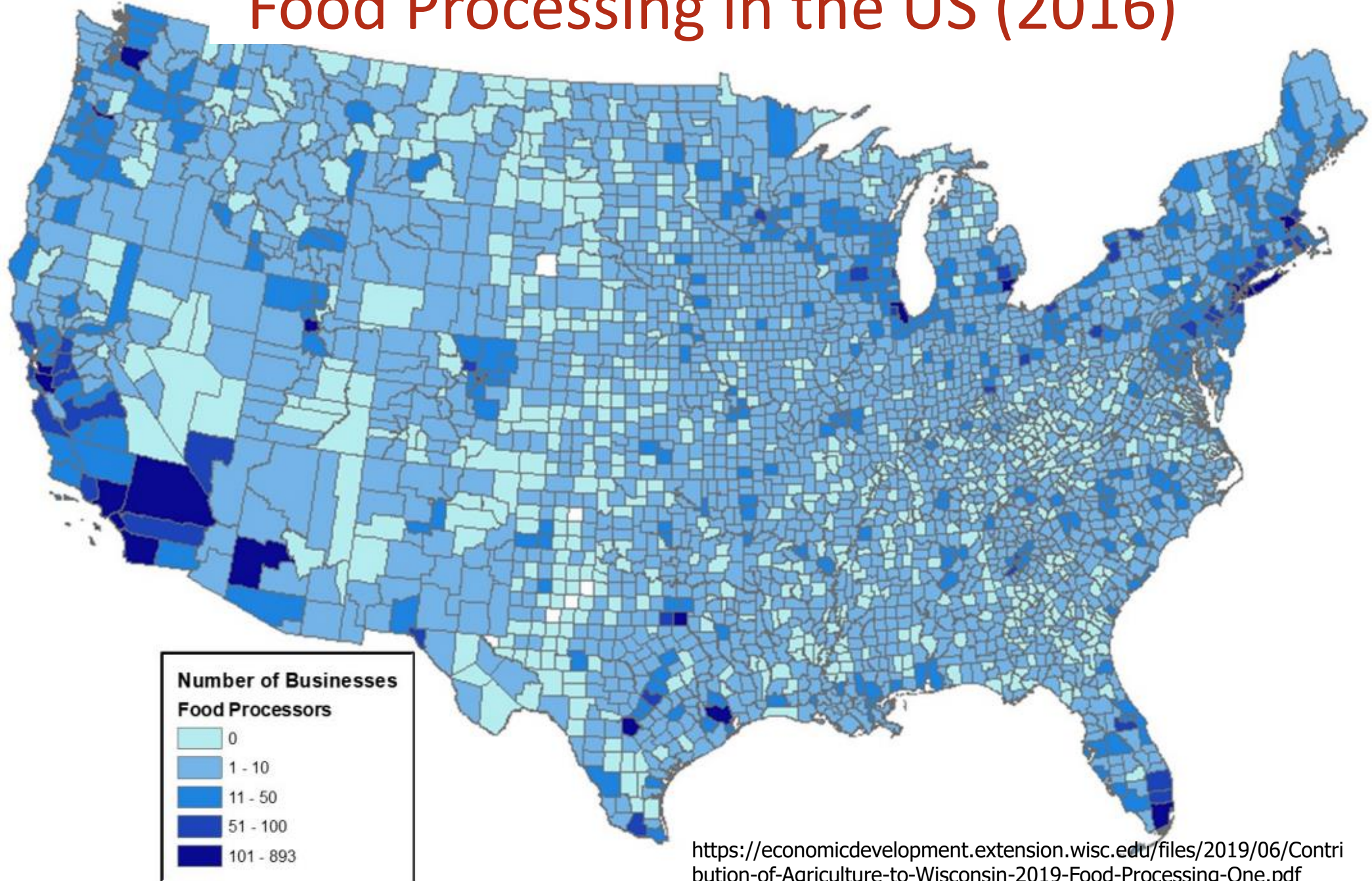
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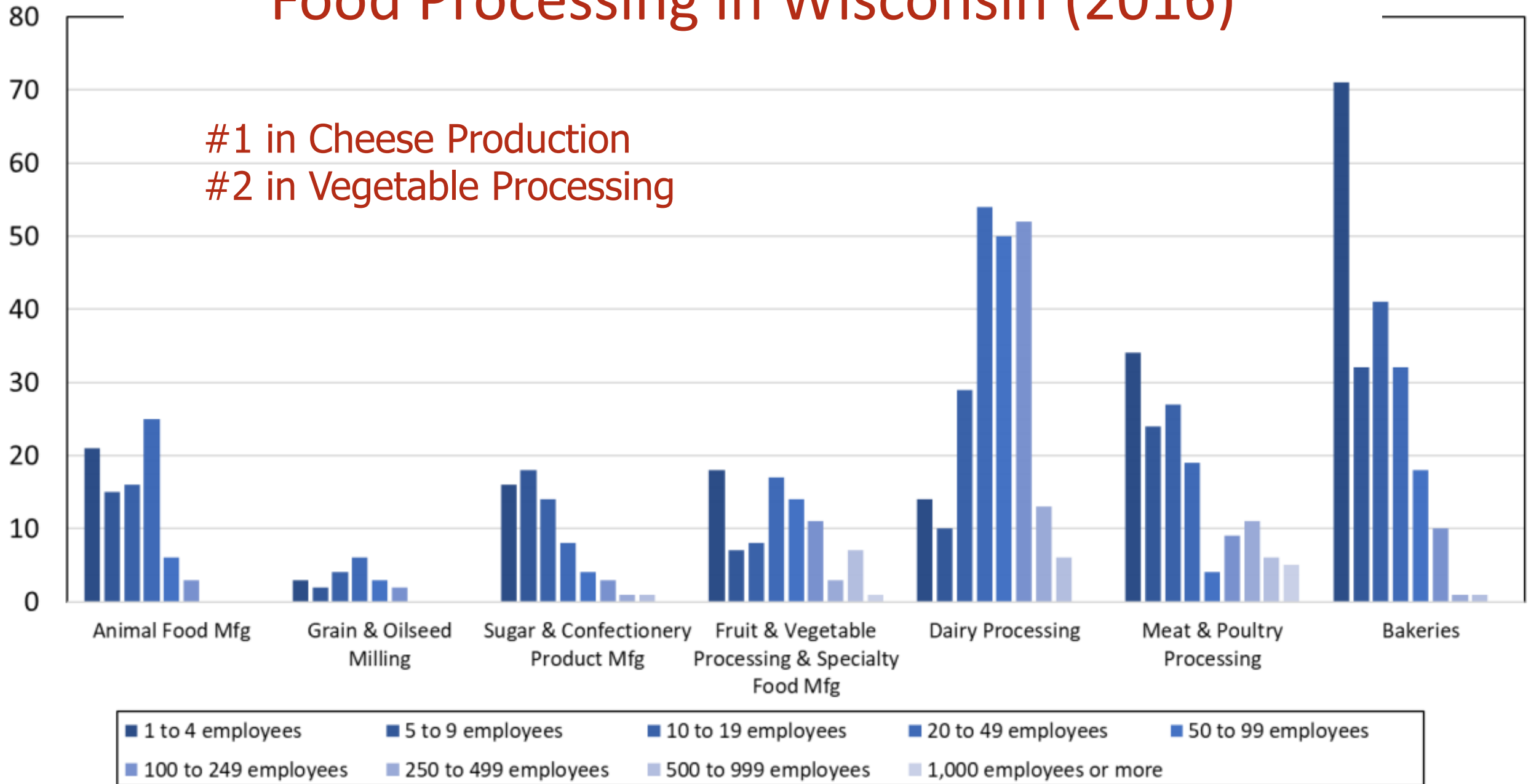
Food Processing in the US (2016)



<https://economicdevelopment.extension.wisc.edu/files/2019/06/Contribution-of-Agriculture-to-Wisconsin-2019-Food-Processing-One.pdf>

Food Processing in Wisconsin (2016)

#1 in Cheese Production
#2 in Vegetable Processing



Meat Processing in Wisconsin

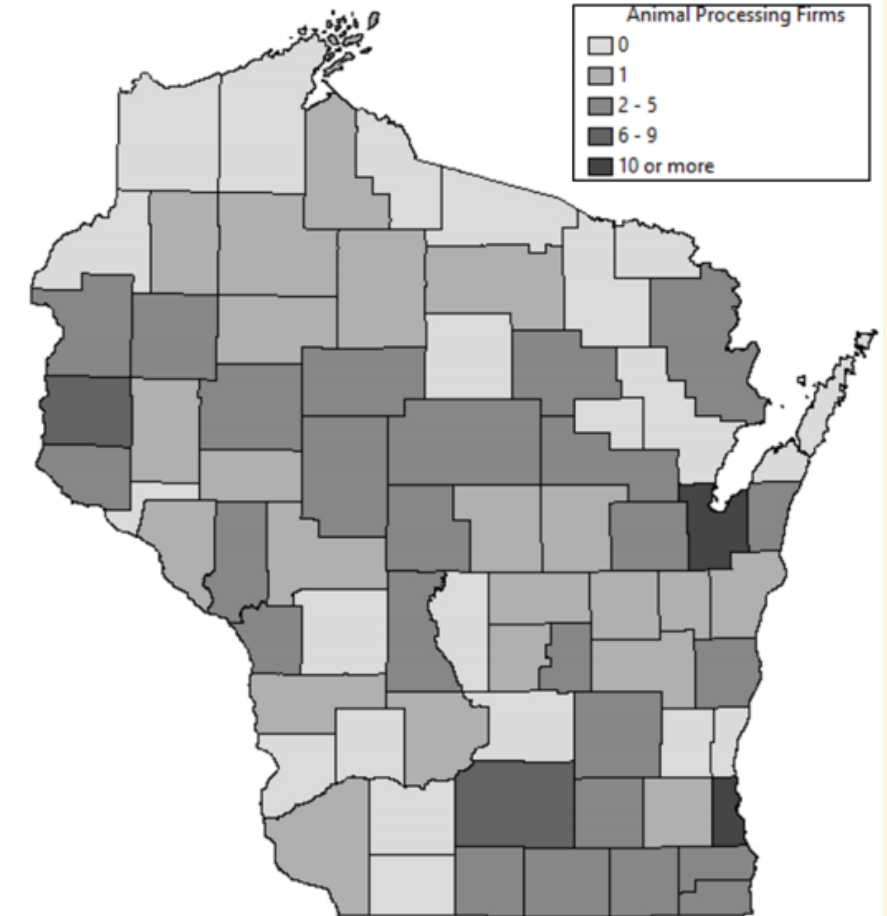
#14 in Red Meat Slaughter

Table 1: Meat & Poultry Processing by Size

(Number of Employees)	Firms	
1 to 4	34	24.5%
5 to 9	24	17.3%
10 to 19	27	19.4%
20 to 49	19	13.7%
50 to 99	4	2.9%
100 to 249	9	6.5%
250 to 499	11	7.9%
500 to 999	6	4.3%
1,000 or more	5	3.6%

In 2017, WI had 139 meat and poultry processing businesses with total sales of \$8.6 billion and employing 16,250 workers

Map 1: Animal Processing Firms



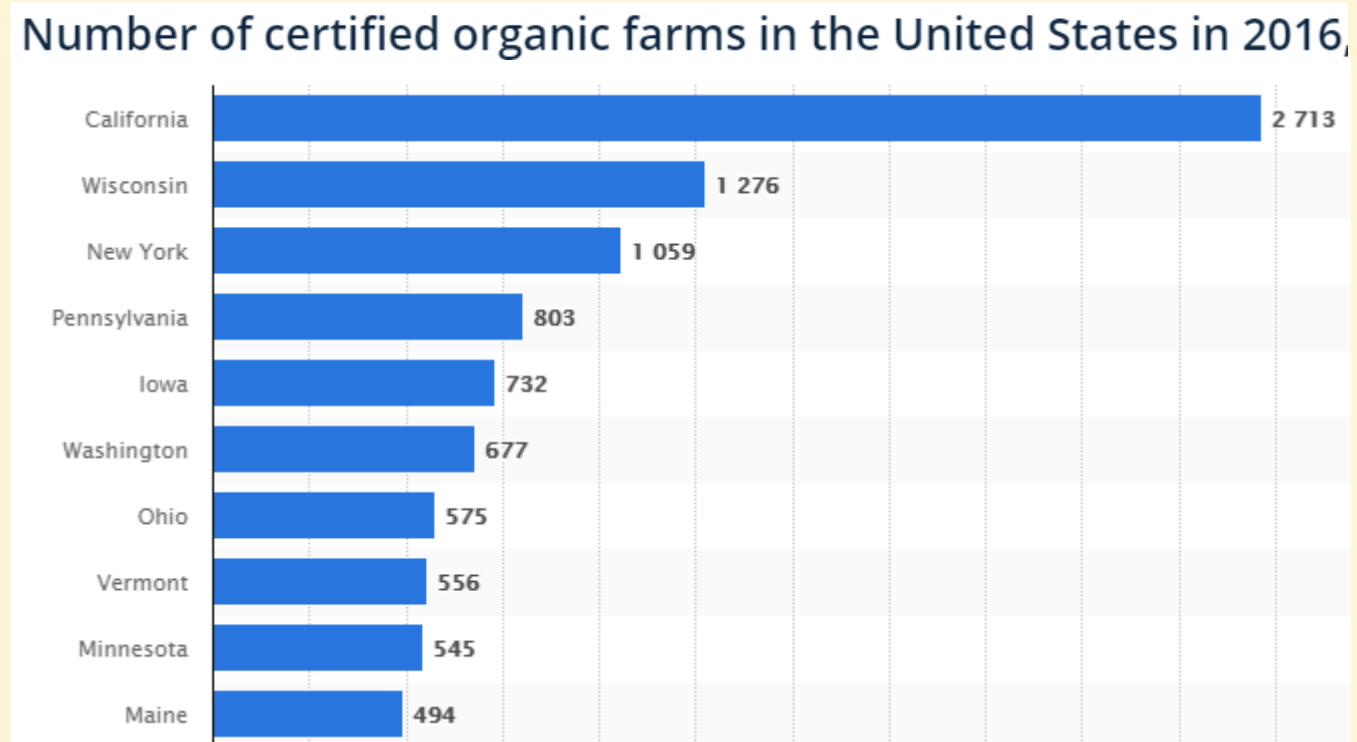
Wisconsin Processors are Very Good at Making Cured Meats

- Jan 2019 UW hosted the German Butcher's Association international meat judging competition "IFFA Quality Competition"
- 460 entries from 42 butchers
- Awarded 351 gold medals
- Louie's Finer Meats of Cumberland, overall winner with 31 gold medals, 1st place in Sausage
- RJ's Meats of Hudson 1st place in Ham with 10 gold medals, 2nd in Sausage with 18 gold medals



Wisconsin's National Prominence in Organic Ag

- In 2016 Wisconsin had 1,276 certified organic farms, 219,266 certified acres and \$255 million in organic sales from farms
- This is 9% of the organic farms in the US, 4.4% of the organic acres and 3.4% of the organic sales from farms



Types of Organic Farms in Wisconsin in 2016

Product	WI Farms	% of the US	WI Sales (\$M)	% of the US
Milk	453	18%	\$125.9	9%
Beef Cattle	527	17%	\$15.8	10%
Hogs	20	13%	\$2.6	37%
Broilers	18	8%	\$0.9	<1%
Field Crops	587	12%	\$24.8	3%
Vegetables	291	9%	\$24.5	1%
All	1,276	9%	\$255.5	3%

Why Not Link These Two Areas of Excellence?

- Organic meat seems like an obvious area of expansion for Wisconsin
- Cured meats (not raw meats): beef sticks, sausage, bacon, ham, deli turkey, hot dogs, ..., Organic cured meat growing \$150 million annually
- Curing Powder is a combination of salt and sodium nitrite
 - Preserves and colors the meat, prevents botulism
 - Some have sodium nitrate and potassium nitrate, beet, parsley,
- Uncured meat: uses “natural” sources of nitrites, often celery “salt”
- The Problem: No organic sources for curing powders, but derived from conventionally grown celery, allowances given in 2007, 2012, 2017

USDA's Organic Agriculture Research and Extension Initiative (OREI) Project at UW

- Organic Alternatives to Conventional Celery Powder as a Meat Curing Agent
- Erin Silva, Jeff Sindelar, Paul Mitchell (UW)
- Xin Zhao (U FL) and Jessica Shade (Organic Center)
- Objective 1: Assessment of the impacts of nitrogen (N) fertility, genetics, and environment on nitrate levels in organic celery, chard, and beets
- Objective 2: Quality and safety assessment of cured meat products using organic vegetable powder
- Objective 3: Economic and market assessment of organic celery powder and cured meat

Wisconsin Can Grow Organic Celery as Raw Feedstock for Making Curing Powder

- Leach Farms in Berlin and Trembling Prairie Farms of Markesan both grow celery at scale, neither farm seems to be organic
- California and Michigan have the most (conventional) celery acres, but Michigan does not have the organic farms



Unique Flavors of the Driftless Region

- Woodland and oak savannah grazed cattle, hogs and turkeys
 - Jamon Iberico from hogs raised on ancient oak pastures of Spain
 - Nueske's Bacon: apple wood smoked
- Cranberry, apples, hickory nuts, black walnuts, ginseng, juniper, wild berries or grapes, morels, mayapple, wild ginger, herbs ...
- Driftless Food Hub centered in La Crosse/Viroqua/Cashton



Thanks for your Attention!
Questions? Comments?

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